

IOWA DEPARTMENT OF NATURAL RESOURCES

ASSESSMENT GUIDE

for

ENVIRONMENTAL MANAGEMENT SYSTEMS



G R E S H A M
S M I T H A N D
P A R T N E R S

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I. Introduction

This document serves as a practical guide for conducting an environmental management system (EMS) assessment to support activities under House File 2570. The assessment process is an important and necessary step that aids in continual development and is a determining factor in the success of the EMS. In addition to the assessment guide, an assessment checklist and example assessment question will be provided as an attachment. This document provides an overview of the following:

- EMS
- Purpose of an Internal Assessment
- Assessment Process
- Selection of Assessor
- Assessment Preparation
- Conducting an Assessment
- Assessment Reporting & Follow-up
- Assessment Best Practices



II. Definitions

A. Assessment Checklist

The document that outlines the requirements of the EMS and evidence to be collected by the assessor.

B. Assessment Frequency

Establishes and defines the overall assessment schedule (at least one assessment of each EMS element each year).

C. Assessment Plan

Describes the assessment schedule and site locations as well as interviews and the documents and/or records that are needed to support verification that the EMS is in place and working as planned.

D. Assessment Report

Documents the assessment process, evidence collected, and findings from the EMS assessment.

E. Assessment Scope

Defines which elements of HF 2570, the areas of operation, and the time-frame the assessment will cover.

F. Corrective Action

Steps taken to correct processes or activities within the EMS as observed in routine checks through internal assessments.

G. Environmental Management System

A systematic process for proactively managing environmental impacts and continually improving environmental performance.

H. Environmental Management Representative (EMR)

The person responsible for the day-to-day EMS implementation.

I. EMS Assessment

A systematic and documented verification process of objectively obtaining and evaluating assessment evidence to determine whether an organization's EMS conforms to the EMS assessment criteria set by the organization (HF 2570).

J. EMS Core Team

The persons responsible for assisting the EMR with making sure the EMS is designed to fit the organization.

K. Findings

Results of the EMS internal assessment that confirm if the EMS elements have been implemented as designed and are providing benefit to the organization.

L. Root Cause Analysis

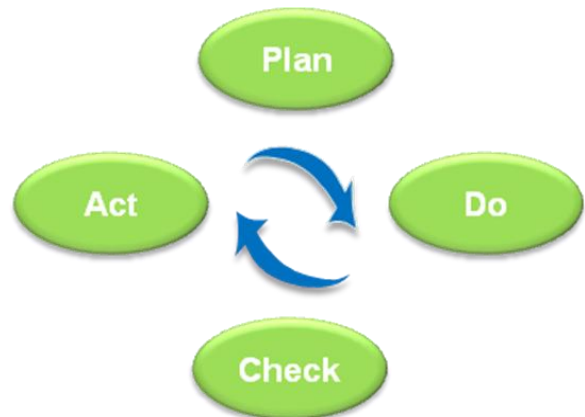
Process, conducted by EMR or facility manager, that seeks to identify the true cause of a finding from the assessment.

III. What is an Environmental Management System?

The Iowa legislature passed House File 2570 in 2008 as an alternative approach to the traditional focus on waste diversion. The legislation establishes a program and process that allows solid waste planning areas or agencies to be designated as environmental management systems (EMS). An EMS is a set of processes and procedures developed by an organization to proactively manage its environmental impacts. An EMS is based on the continual improvement cycle of "plan, do, check, and act." Many organizations use an EMS to not only identify and evaluate environmental legal requirements, but to reduce overall environmental impacts and associated regulatory compliance risks. An EMS can also be used to reduce costs and inefficiencies, prevent work disruptions, improve worker morale and generate positive public perception.

The Solid Waste Alternatives Program Advisory Council (Council) further defined the EMS to include the following ten elements:

1. Environmental Policy Statement
2. Environmental Impacts



3. Legal and Other Requirements
4. Objectives and Targets
5. Action Plan
6. Identify Roles and Responsibilities
7. Communication/Training/Awareness
8. Monitoring and Measurement
9. Assessment
10. Reevaluation and Modification

The first three are the main overarching elements of the EMS. The next seven elements have been applied to the identified six plan components which include: Yard Waste Management, Hazardous Household Waste Collection, Water Quality Improvement, Greenhouse Gas Reduction, Recycling Services and Environmental Education.

An outline of the ten EMS elements in the categories of Plan, Do, Check, and Act are described below:

Plan – An *environmental policy* for the organization is established. *Legal requirements* are identified as well as the environmental priorities (or *aspects and impacts*) of the organization. Environmental *objectives and targets* are developed along with the *action plans* that outline the associated schedules and responsibilities. *Roles and responsibilities* for the EMS are also documented and communicated.

Do – The organization implements its environmental policy and associated environmental objectives and targets. This is accomplished through *training, communication*, documentation, and environmental controls. Results of the EMS are documented and evaluated through *monitoring and measurement* of performance indicators.

Check – A review or *assessment* of the EMS is conducted and the results are evaluated. Any gaps in the EMS or compliance are documented and corrected.

Act – The EMS is *reevaluated and modified* with senior management with a discussion of accomplishments of the organization as well as any compliance or system weaknesses. Revisions to the EMS are made as necessary.

IV. Purpose of an Internal EMS Assessment

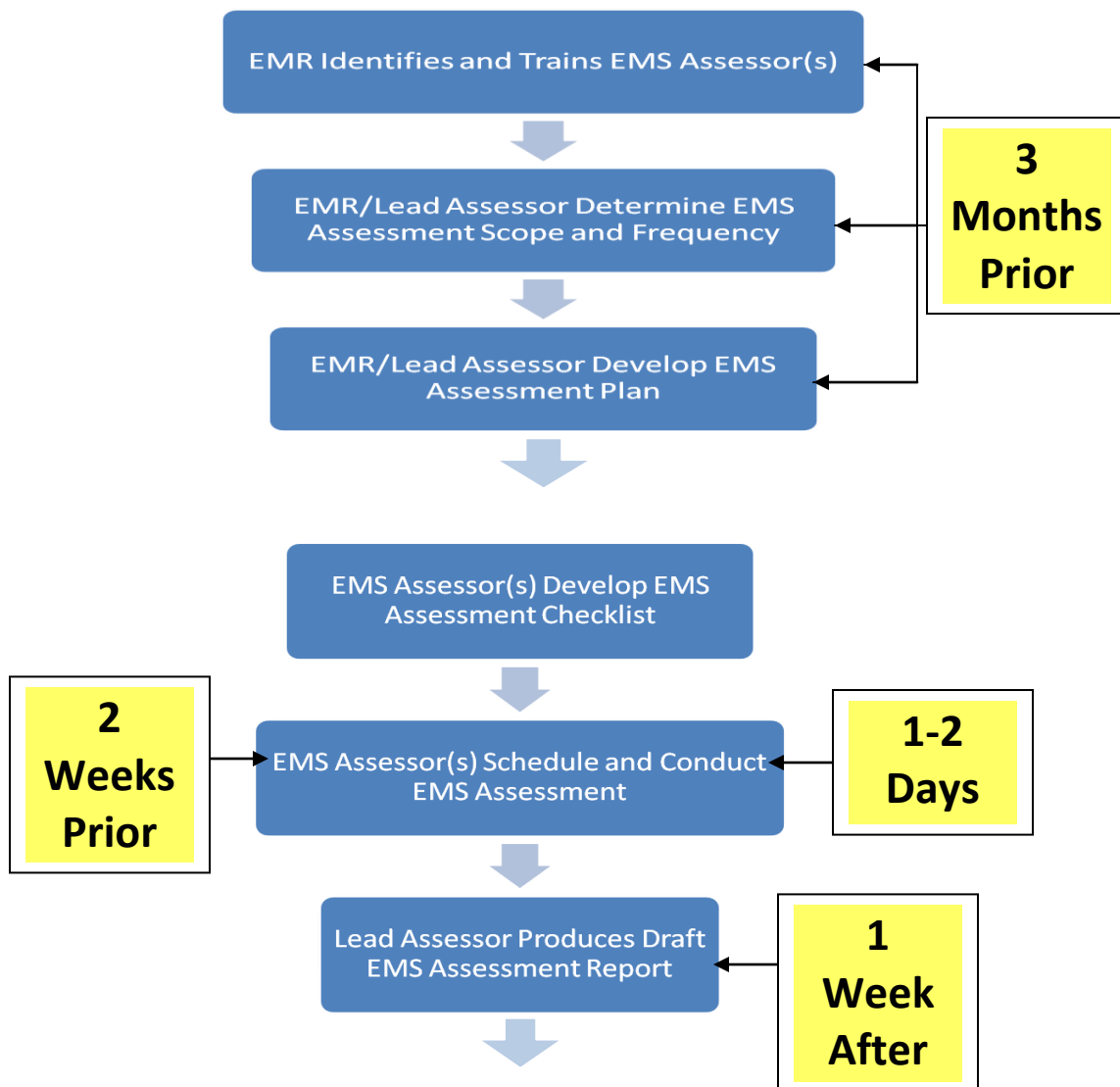
The purpose of an EMS assessment is to proactively identify what is working in the EMS, as well as potential weaknesses. *The most successful EMSs demonstrate continual improvement, and have documented monitoring and measurement results that verify the environmental improvements.* The assessment results may offer a new perspective as to how effectively the EMS is performing. The organization should embrace an EMS assessment as an important, and objective, review to facilitate continually improvement.

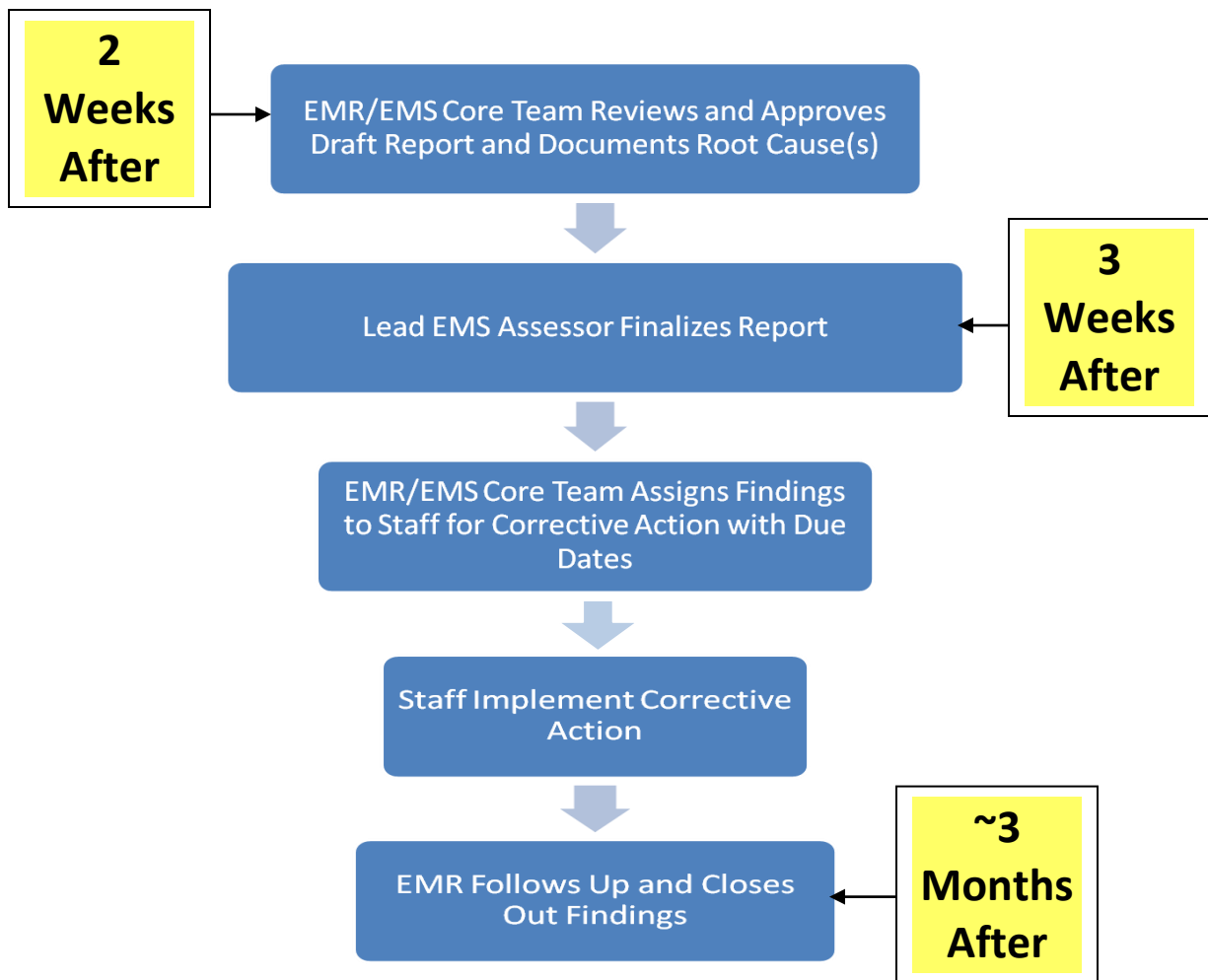
Following the EMS assessment, it is important that the organization identifies the root cause (s) of assessment findings in order for the system to continually improve. If the same problems arises in every assessment, then the true root cause has not been identified, and will prevent future assessments from identifying additional areas of weakness and system strengths. Overtime, internal assessments will need

to adapt and incorporate any legal, budget, staff and/or operational changes within the organization that may affect the EMS.

V. Assessment Process

Outlined below are the steps to developing an effective assessment process.





VI. Selection of EMS Assessor

The first step in conducting an EMS assessment is to identify an assessor, preferably someone who has not had direct and close involvement in the development of an EMS. The selection of an assessor must ensure that that objectivity and impartiality of the assessment remains intact. Traits of a good candidate include: selecting an individual that has a desire to be involved in the EMS; being able to engage employees and help put them at ease; has some environmental knowledge or concern; and remains tactful throughout the assessment process. If good candidates are scarce, consider looking outside the EMS fenceline for someone willing to conduct the assessment.

Several different contributing factors can make selecting an assessor problematic. For example, organizations that are small in size may have a difficult time identifying an assessor due to limited staff. Additionally, most of the individuals with environmental knowledge, or knowledge of how an EMS operates, are already on the EMS core team, making it difficult to identify someone with enough environmental knowledge to perform a thorough assessment.

Once an individual has been selected, scheduling conflicts may arise due to limited time availability for training and conducting the assessment. It is important that the assessor and EMS Core Team/EMR communicate and remain flexible during the assessor selection, training and scheduling phase.

VII. Assessment Preparation

To begin preparing for the assessment, the EMR and lead assessor will work together to determine the EMS assessment scope and frequency. In general, the ten elements of the EMS need to be assessed at least once per calendar year. The assessor will need to develop an EMS assessment plan (see Example in Appendix C) that will serve as a planning tool to facilitate the assessment process. The plan should document a detailed schedule that includes the location of the facilities and persons being interviewed. In addition, it should identify records and documents that are needed during the assessment to verify the EMS is in place and working effectively. The EMS assessment checklist will need to be reviewed and finalized during the assessment preparation phase as well (Example in Appendix A). The assessment checklist ensures all ten elements of the EMS are covered and relevant evidence is collected. A time and location will also need to be set for the kick-off and closing meetings. These meetings are an important step during the assessment, as they provide an opportunity for the auditor to discuss what the EMS assessment plan and process will look like to the EMS Core Team/EMR.

Prior to the assessment, the EMR/EMS Core Team should compile and review EMS related documents and records to help the process move along smoothly. If the organization is utilizing Intelex to manage the EMS, access to Intelex should be considered either prior to the assessment or during the assessment. The EMR should also review any findings from the prior assessment and follow up to ensure corrective action is in place and effective. In addition, staff should be notified by the EMR about the upcoming assessment.

VIII. Conducting an Audit of HF 2570's EMS Elements

The following sections describe each EMS element in detail and the associated evidence to be collected by the assessor. It is important to note that the assessment is a combination of interviews with staff, as well as review of documents and records, particularly monitoring and measurement results. Interviews with staff should work to identify whether the staff member understands and implements their role in the EMS.

The week prior to the scheduled assessment, it is recommended that the assessor reviews any documented procedures and associated records to become familiar with the organization's EMS.

An assessment can be organized in many different ways, however most assessments start with an opening meeting and are followed by an in depth document and record review with the EMR and/or EMS Core Team. Following this review, interviews are scheduled with appropriate staff, as well as site visits to collect needed evidence from the field.

Following the assessment, the EMR and the Assessor should meet to review the evidence collected. If there is an area of weakness or whether the EMS is not performing according to HF 2570 or to the organization's procedures, then the EMR and the Assessor should agree there is a "finding" or a "non-conformance". Following agreement on these findings, a closing meeting should be held with the appropriate stakeholders to review and approve these findings. If an agreement cannot be reached, the Assessor should note the finding in the assessment report and that there was not agreement on the status of the finding.

An assessment report or table should be prepared by the assessor and presented to the EMR and/or EMS Core Team for review and approval.

The information presented is intended to assist an assessor new to this process and just like the EMS, the EMS assessment process will continually improve over time.

A. Overview of EMS Documentation

Although documentation is not technically a component of the EMS, it's presence is necessary to demonstrate that the EMS is in place and working. Additionally, several of the EMS elements require written EMS procedures. EMS procedures are the written instructions on how the EMS was developed and how it will continue to be implemented. EMS documents also include records such as the list of legal and other requirements and the list of significant impacts. Records provide proof or evidence that the EMS is in place and functioning. Most records cannot, or should not, be changed. Examples of records include: completed training logs, completed inspection checklist and waste manifests. Records should be easily identifiable and accessible, and properly retained according to the organization's record retention process.

As part of an EMS it is also recommended that a document control system is put into place to ensure documents are retained as required and updated as needed. Document numbering systems may be utilized as a primary method to ensure that a procedure or process is approved and that staff is working from the latest document.

Required EMS procedures include: Communication, Training, and Awareness Procedure, Monitoring and Measurement Procedure, Assessment Procedure, and Reevaluation and Modification Procedure. It is important to note that the organization may have additional EMS procedures. In addition to the required documentation, the organization may have developed an EMS Manual to outline how the EMS was put in place and to organize the EMS documentation. If available, this document would work as a reference for the assessor and as a beginning step in the assessment process.

Example records that are required for the EMS include: environmental aspect and impact list (with significant impacts), objectives and targets with associated action plans and current status, legal and other requirements list, log of information requests from the public with corresponding references, records of metrics data, training records, and a memorandum of reevaluation results with proposed modifications.

Assessment Process

<p><u>READ:</u></p> <ul style="list-style-type: none"> • Environmental Policy Statement • Environmental Impacts List • Legal and Other Requirements List • Objectives and Targets List with Action Plans • Communication, Training, and Awareness Procedure • Monitoring and Measurement Procedure • Assessment Procedure • Reevaluation and Modification Procedure 	<p><u>EVIDENCE:</u></p> <ul style="list-style-type: none"> ▪ Do the documents comply with the HF 2570? ▪ Have documents required by environmental regulations been developed? ▪ Have any of the documents been updated? ▪ Have the documents been approved by management? ▪ Is staff working from the latest procedure? ▪ Is document control in place and working effectively? ▪ Have the documents been reviewed and updated? ▪ Does the organization have a records retention process in place? Are records being properly retained? ▪ Are the records easily identifiable and accessible?
<ul style="list-style-type: none"> • Records of Objectives and Targets Status • Waste Manifests • Training Records • Log Information Requests from Public • Records of Metrics • Memorandum of Reevaluation Results with Proposed Modifications 	
<p><u>INTERVIEW:</u></p> <ul style="list-style-type: none"> ▪ EMR/EMS Core Team ▪ Senior management ▪ Staff ▪ Field employees 	

Helpful Hints

- ✓ It is important to not lose sight of the fact that the EMS is about environmental improvements and not documentation. The documentation should provide evidence that the EMS is working, environmental improvements are occurring, and the organization is continually improving.

B. Environmental Policy Statement

The environmental policy is a statement of management's commitment to the environment. It can be used to educate staff and the public on the organization's environmental commitment to pollution

prevention, environmental compliance and continual improvement. The policy should be documented and approved by management. Environmental policy statements can vary greatly based on organizational needs and goals.

HF 2570 Essentials

"Statement by the organization of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets, and its commitment to continual improvement through the EMS."

Assessment Process

<u>READ:</u> <ul style="list-style-type: none">• Environmental Policy Statement	<u>EVIDENCE:</u> <ul style="list-style-type: none">▪ Does the document comply with the HF 2570 by stating the organization's environmental commitments and have a framework for setting objectives and targets?▪ Has the policy been updated?▪ Has the policy been approved by management?▪ Ask EMR/EMS Core Team about the origins, content and how they communicate the Environmental Policy Statement to staff and/or the public.▪ Look for posted Environmental Policy Statements around the facility.▪ Ask staff if they are aware of the organization's Environmental Policy Statement and/ environmental commitments. If yes, ask what it says or means to them? How does it affect their job?
<u>INTERVIEW:</u> <ul style="list-style-type: none">▪ EMR/EMS Core Team▪ Senior management▪ Staff▪ Field employees	

Helpful Hints

- ✓ It is not important for people to recite the environmental policy, it is about knowing that the organization has an environmental policy, what its overall environmental commitments are, and how it affects their job.

C. Environmental Aspects and Impacts

An environmental aspect is the interaction of an activity with the environment. An environmental impact is any change, positive or negative, to the environment. The main reason for development and implementation is to identify, prioritize and ultimately reduce the negative environmental impacts. Examples of environmental aspects include generation of hazardous waste and air emissions. Examples environmental impacts include: degradation of air quality and natural resources, reduction in water usage, and a decrease in waste generation. The environmental aspects and impacts that the organization identifies as the highest priority become their significant aspects and impacts. All significant aspects and impacts must be addressed in the EMS, primarily through the adoption of an objective and target.

Organizations usually document the process in determining activities, impacts and significant impacts through development of an Environmental Aspects and Impacts Procedure. Accompanying the

Procedure should be a list of the organization's environmental aspects and impacts and the significant aspects and impacts. The procedure should include responsibilities and activities, aspects, impacts and significant impacts should be updated on a regular basis to accurately reflect the organization's goals.

HF 2570 Essentials

"The organization identifies and evaluates the actual or potential aspects and impacts to the environment, whether adverse or beneficial, from its activities, services and facilities. During the evaluation process, significant impacts to the environment are determined."

Assessment Process

<u>READ:</u>	<u>EVIDENCE:</u>
<ul style="list-style-type: none"> ▪ Environmental Aspects, Impacts and Significance Criteria Procedure ▪ Environmental Aspects and Impacts Ranking Table ▪ Significant Impacts Table 	<ul style="list-style-type: none"> ▪ Is there a Procedure and has the organization followed it? ▪ Review the current version of the Environmental Aspects and Impacts List. Does the list appear to capture the relevant activities within the fenceline? Did the organization follow their Procedure in developing the List? Are positive and negative aspects and impacts included? ▪ Ask EMR/EMS Core Team about the

INTERVIEW:

- EMR/EMS Core Team
- Staff
- Field employees

development and criteria of ranking significant aspects and impacts. Are the six plan components considered significant?

- Has the EMR reviewed and updated the List each year? Does it conform with the Procedure?
- Is senior management in agreement with the significant aspects and impacts?
- Ask staff/field employees if they are aware of how their job responsibilities may affect the environment.

Helpful Hints

- ✓ EMR needs to understand the really understand the process of identifying and selecting environmental aspects and impacts (How they did it, why they did it, etc.).
- ✓ The six environmental components must be addressed when considering environmental impacts. Ask the EMR and EMS Core Team how they ensured that the six component areas fell into the “significant” range when determining significant impacts.
- ✓ Staff should be aware of the significant impacts that affect their job (ex. Backhoe operations may have significant environmental impacts such as spills and emissions from the use of fuel).

D. Legal and Other Requirements

Most organizations with an EMS have actively managed and implemented environmental regulations for many years. Examples of legal requirements include: HF 2570, Stormwater Pollution Prevention Plan (SWPPP), Spill Prevention, Control & Countermeasure (SPCC), Occupational Safety and Health Administration (OSHA), Resource Conservation and Recovery (RCRA), and Conditionally Exempt Small Quantity Generator (CESQG). Other requirements may include: Energy Star, Management Directive, and EPA/DNR Voluntary Commitments. However, each of these requirements is facility dependent.

HF 2570 Essentials

“The organization must identify the legal requirements for its operations and facilities, including relevant environmental laws, regulations and permits, and worker health and safety regulations, and have a process for tracking any changes in these requirements.”

Act

In many cases, the EMS assessor is not a compliance expert and not expected to understand the legal requirements affecting a facility. The EMS assessor should focus on the process to develop and update the Legal and Other Requirements list and whether the organization actively manages its regulatory obligations.

The organization should have a Legal and Other List of the regulatory requirements. In addition, most organizations use a Legal and Other Requirements Procedure to document and assign responsibilities to staff, documents how the Legal and Other Requirements List was developed, includes a process to keep informed of regulatory changes, and describes how changes in regulations will be incorporated into the EMS.

Assessment Process

<p><u>READ:</u></p> <ul style="list-style-type: none"> ▪ Legal and Other Requirements Procedure ▪ Legal and Other Requirements Table/List 	<p><u>EVIDENCE:</u></p> <ul style="list-style-type: none"> ▪ Does the Procedure outline how the Legal and Other Requirements are identify and tracked through time? Ask if the organization has received any violation notices and how it would be addressed in the EMS. ▪ Review the current version of the Legal and Other Requirements List. Ask the EMR if there have been any changes and/or updates to regulations. ▪ Check for OSHA (health and safety) requirements on the List. ▪ Ask to speak with the compliance manager for the facility and interview the staff on how they manage the requirements, keep records, and train staff. ▪ Ask staff if they are aware of environmental and safety requirements that may affect their job?
<p><u>INTERVIEW:</u></p> <ul style="list-style-type: none"> ▪ EMR/EMS Core Team ▪ Staff 	

Helpful Hints

- ✓ Staff should be aware of not only environmental requirements, but safety as well.
- ✓ The focus of the assessment should be to verify there is a process in place for tracking, reviewing, and updating legal and other requirements.
- ✓ Remember to conduct an assessment of conformance with EMS, not legal requirements. Not everyone needs to be an expert, but they need to have identified a staff member or consultant that manages and tracks legal requirements for the organization.

E. Objectives and Targets

An objective is an environmental goal that is set to help reach an overall environmental change that the organization wishes to achieve. A target is a detailed, measurable performance requirement that is set to achieve a specific outcome of the objective.

HF 2570 Essentials

“The organization establishes objectives relevant to its policy, environmental issues and impacts previously identified, the views of interested parties, and other factors. Targets necessary for achieving the stated objectives are also established. A target is much more detailed than its objective and must be quantifiable.”

Setting targets are a necessary step in order to complete the stated objective. Metrics are established to measure the accomplishment of objectives and are an indicator of environmental performance of the EMS.

Some organizations will have an Objective and Target Procedure, but it is not a requirement. However, the organization should have a list of objectives and targets for review.

Assessment Process

<u>READ:</u> <ul style="list-style-type: none">▪ Objectives and Targets Procedure▪ Objectives and Targets Table▪ Objectives and Targets Progress Reports	<u>EVIDENCE:</u> <ul style="list-style-type: none">▪ Ask the EMR how the objectives and targets were developed and how they are reviewed and kept current? How are budget and/or staff allocated for objectives and targets?▪ Review the current Objectives and Targets List.▪ Check that objectives are set for each of the six plan components.▪ Check that objectives are set for significant aspects and impacts.▪ Make sure targets are set with quantifiable and include due dates. What is their progress on objectives and targets?▪ Is the organization reducing their environmental impacts? If not, why?▪ Are those assigned to objectives and targets measuring tracking progress?▪ Ask to speak with at least one person managing an objective and target and discuss the process of carrying out this task?▪ Interview staff members if they are aware of the environmental goals of the organization?
<u>INTERVIEW:</u> <ul style="list-style-type: none">▪ EMR/EMS Core Team▪ Staff assigned to objective and target task▪ Senior management	

Helpful Hints

- ✓ Objectives and targets need to be concise, realistic, measurable, and time bound.
- ✓ Are objectives and targets being tracked? Are they making progress?
- ✓ Reviewing the objectives and targets with the action plan and monitoring and measurement is the best approach to verify progress is being made.

F. Action Plan

Action plans serve as roadmaps for achieving the objectives and targets set by the organization. They list specific tasks or activities with assigned responsibilities and associated due dates and create a process for reporting and tracking. Key resources such as costs, staff, skills, equipment and any additional needs should be

identified in the action plan. Action plans should be updated as additional information becomes available such as grant funding, changing budgets, high technology costs, and staff availability.

HF 2570 Essentials

“Actions necessary to achieve the objectives and targets. The plan includes identifying the individuals and/or organizations responsible for carrying out specific tasks, timelines for completion of each step in the plan, and a schedule for periodically reviewing and updating, as conditions dictate, the objectives and targets. As part of reviewing the draft of the action plan, conduct an inventory of key resources needed to carry out and complete the action plan. Resources may include staff, fiscal matters, specific skills, facilities, partners, and additional needs. Upon completion of the inventory the action plan may need to be adjusted accordingly.”

Assessment Process

<u>READ:</u> <ul style="list-style-type: none">▪ Action Plans for associated Objectives and Targets▪ Objectives and Targets Progress Reports	<u>EVIDENCE:</u> <ul style="list-style-type: none">▪ Review the current Action Plans for each objective and target and determine if each objective and target has a well laid out plan for implementation.▪ Are the action plans still achievable?▪ Have any changes been made to the action plans due to budget, costs, or staff availability?▪ Is there a process to actively manage and track the action plans?▪ If changes have been made, is the organization still on track to meet the objective? Do the changes made to the action plans still accurately reflect the expected outcome?▪ Are the action plan due dates being met? If not, why?
<u>INTERVIEW:</u> <ul style="list-style-type: none">▪ EMR/EMS Core Team▪ Staff assigned to action plan task	

	<ul style="list-style-type: none"> Are assigned staff aware and keeping track of progress on the action plans?
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Helpful Hints

- ✓ The action plan should be developed into a step-by-step-process that rolls up to achieve the objective and target. It is important to note that organizations are limited with staff and budget and these action plans should reflect the reality of these limitations.
- ✓ The action plans should be assigned to a staff member with appropriate due dates and there should be demonstrated progress overall on the objective and target.
- ✓ Remember, if someone is listed in the action plan that you have planned to interview later in the day, make a note to ask them about their assigned action plan task.
- ✓ It is recommended that action plans are reviewed in conjunction with objectives and targets and monitoring and measurement.

G. Identify Roles and Responsibilities

An organization must identify those individuals who are responsible for developing, managing, and implementing the different components of the EMS. Many EMS activities will be managed through the EMR and EMS Core Team. Roles and responsibilities related to EMS activities include training staff, updating documents and procedures, reporting on corrective actions and audit findings, monitoring and measuring metrics, and maintaining records. EMS responsibilities must be documented and communicated to each responsible party in order for the EMS to run efficiently.

HF 2570 Essentials

“Responsibility for implementation of the elements of the EMS program need to be identified, documented, and communicated to relevant staff.”

Some organizations may have a roles and responsibilities procedure but all organizations should have a roles and responsibility matrix or list.

Assessment Process

<u>READ:</u> <ul style="list-style-type: none"> Roles and Responsibilities Procedure Roles and 	<u>EVIDENCE:</u> <ul style="list-style-type: none"> Review the current Roles and Responsibilities Matrix and ask the EMR about its development. Ask the EMR about how the matrix is kept up to date and communicated to staff.
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Responsibilities Matrix	<ul style="list-style-type: none"> ▪ Have any staff changes been made that aren't reflected in the document? ▪ Have any EMS roles or responsibilities been added or deleted from changes in objectives and targets? If so, does the document accurately reflect this? ▪ Are staff aware of their EMS related roles and responsibilities as identified in the matrix?
<u>INTERVIEW:</u> <ul style="list-style-type: none"> ▪ EMR/EMS Core Team ▪ Staff that may have EMS related responsibilities 	

Helpful Hints

- ✓ Roles and responsibilities for the EMS should have been communicated to staff. This communication can be in a variety of means including email, posters, handouts, etc.
- ✓ Note people that have been identified as having an EMS related-task. Ask them about their roles and responsibilities during an interview.

H. Communication/Training/Awareness

Communication is the key to success within an EMS, without it the EMS becomes a book on the shelf. Communication helps garner support to build an effective management system.

Communication also creates employee buy-in and makes staff aware that environmental considerations are a part of everyone's job, and develops stakeholder awareness that is crucial to many objectives and targets. The goal of internal communication is to systematically raise the EMS awareness of internal staff. Printed media such as newsletters and brochures, Earth Day Celebrations, Pollution Prevention Week, and award and recognition programs are all different types of internal communication. The goal of external communication is to raise awareness of the EMS and external participation in achieving objectives and targets. Public events can be used to communicate with the community about the organization's environmental policy and top objectives

and targets. It is also important to document external communication such as requests, questions, or comments from the public.

HF 2570 Essentials

"Establish processes for internal and external communication. External communication will include reaching out to those groups and organizations that have been identified as having an interest, stake, or role in the organization's ongoing EMS program. There must also be procedures for receiving and responding to relevant communication from external interested parties. Internal communication is directed to individuals, organizations and entities that have a role or responsibility within the action plan. Training includes a process to ensure that all responsible parties are familiar with the EMS and have the skills necessary to capably execute their roles."

EMS employee training and awareness are vital to achieving continual improvement within the organization. Training may focus on several different areas such as environmental compliance and associated requirements, competency and/or license requirements such as

40-Hour HAZWOPER, general EMS awareness training, minimizing environmental impacts, responsibilities for objectives, targets, and associated action plans, and environmental stewardship.

The organization should have a Communication, Training and Awareness Procedure outlining these programs and associated roles and responsibilities. The training program in the form of a matrix or list should identify EMS training needs for all employees, frequency and provider. Training will be assigned by job description, title, or facility. Training should be tracked and associated records will need to be retained. Training can be tracked through sign-in sheets or through a database that will allow gaps in training to be easily identified.

Assessment Process

<u>READ:</u> <ul style="list-style-type: none">▪ Communication, Training, and Awareness Procedure▪ Review External Communication Documentation▪ Review EMS Training Matrix/Table▪ Supporting documentation for training attended such as sign-in sheets	<u>EVIDENCE:</u> <ul style="list-style-type: none">▪ Review the current EMS Communication, Training and Awareness Procedure. Does it outline the program for both internal and external communication as well as training?▪ What types of communication methods does the organization have in place and review examples?▪ Review External Communication records. Have all requests, comments, and questions been responded too? If not, why?▪ Is the EMS Training Matrix up to date?▪ Have employees had the required training? If not, why?▪ Does training appear to be effective?▪ Are employees competent and aware of the EMS?▪ Do employees know what EMS training is required for their position?
<u>INTERVIEW:</u> <ul style="list-style-type: none">▪ EMR/EMS Core Team▪ Senior management▪ Staff▪ Field employees	

Helpful Hints

- ✓ Some common issues with that arise with EMS training include: people forgetting to attend training, choosing not to go, or being unaware of what training is required.
- ✓ Tracking training can prove difficult. Ensure that the organization has a process in place that is working.
- ✓ Ask staff, “What was the last training you attended, and what did you learn?”
- ✓ Lack of awareness is an indicator of an ineffective training program.

I. Monitoring and Measurement

Monitoring and measuring metrics from action plans with associated objectives and targets are important in demonstrating the success of the EMS. As previously stated, a metric is an indicator of environmental performance. Example indicators include tons of waste, gallons for water use, and metrics tons of carbon dioxide. These metrics need to be monitored, documented and recorded overtime to evaluate the performance of the EMS. It is important to note in some cases metric may be completion of a report or training of staff. Monitoring and measurement help identify potential areas of weakness within the EMS, and organizations can consider changes in metrics that are deemed more appropriate as the EMS matures. Ultimately, the EMS is about making environmental improvements, and this should be reflected in monitoring data.

HF 2570 Essentials

“A documented process for monitoring key activities and measuring performance related to the specific environmental objective and target, at a minimum.”

Organizations should have a Monitoring and Measurement Procedure. All organizations should have their performance indicators available for review.

Assessment Process

<u>READ:</u> <ul style="list-style-type: none">▪ Action Plans for associated Objectives and Targets▪ Monitoring and Measurement Procedure▪ Metrics	<u>EVIDENCE:</u> <ul style="list-style-type: none">▪ Review the Procedure and ask the EMR about how the metrics were identified and how they are tracked.▪ Review the current action plans for each objective and target along with the monitoring and measurement data.▪ Verify that monitoring and measurement data is available for each plan component area and that progress is being made consistently.▪ Are metrics being tracked and recorded for objectives, targets, and action plans?▪ Are there any gaps in the metrics? What are the causes of these gaps?▪ Do metrics accurately reflect environmental performance?▪ Is monitoring equipment functioning properly?▪ Are staff aware of monitoring and measuring requirements from objectives, targets, actions plans, and legal and other requirements?
<u>INTERVIEW:</u> <ul style="list-style-type: none">▪ EMR/EMS Core Team▪ Staff responsible for monitoring and measurement	

Helpful Hints

- ✓ The “gold star” of monitoring and measuring is when staff is able to provide charts, graphs, tables, etc. to demonstrate that they are measuring and tracking progress of the objectives and targets and action plans within the EMS.
- ✓ The assessment process can really help an EMS program achieve success in this element by asking to see the data that has been collected and is being analyzed.

J. Assessment

As previously stated, the EMS assessment process is a way to proactively identify weakness in the EMS and the associated root cause. There are generally two types of assessments, compliance and EMS. A compliance assessment is conducted to determine compliance with local, state and federal laws and regulations. It focuses primarily on paperwork review and site observations, and results in the correction of any findings. EMS assessments are conducted to determine conformance with the EMS. Interviews, paperwork review and site observations are all part of the assessment process. Findings are evaluated for their “root cause” and corrective action is then implemented. EMS assessments are different from compliance audits. They encourage conversation with staff members about the EMS and their views on the environment. Also, the EMS assessment seeks to find weaknesses and strengths within the system. The Assessment places importance on finding the root cause of a finding, rather than a “find and fix” solution. If you develop an effective EMS assessment process, it will drive continual improvement. The assessor will develop an assessment plan and schedule, conduct the assessment, and then prepare a report documenting the findings of the EMS Assessment.

HF 2570 Essentials

“The organization must have documented procedures for assessing the function of each component and its effectiveness of and conformance with the EMS plan. Assessment is the process of drawing conclusions from

The organization should have an Assessment Procedure and there should be records of each assessment previously performed.

Assessment Process

<u>READ:</u>	<u>EVIDENCE:</u>
<ul style="list-style-type: none">▪ Assessment Procedure▪ Assessment Checklist▪ Assessment Reports	<ul style="list-style-type: none">▪ Review the EMS Assessment Procedure and verify the steps are being following in the Assessment

INTERVIEW:

- EMR/EMS Core Team

- Does the EMS Assessment Checklist accurately reflect operations related to the EMS?
- Does the EMS assessment process appear to be in place and functioning?
- Have all assessment reports been reviewed and finalized by the EMR/EMS Core Team?

Helpful Hints

- ✓ In reviewing the assessment element, you may be assessing your own work. Focus the questions to the EMR on the process and how you are making continually improvement as an organization. Ask the EMR about the process and whether they think it is providing value.
- ✓ Assessors should perform a critical review of their own process and whether it is providing value. If it isn't providing value, a discussion of potential improvements should be held with the EMR and/or EMS Core Team.

K. Reevaluation and Modification

The reevaluation and modification of the EMS is conducted with two primary functions. First, it requires identification of which element of the EMS, as reviewed during the EMS assessment,

HF 2570 Essentials

“The reevaluation and modification element is an activity that allows an organization to improve and strengthen the EMS on an ongoing basis. This element considers areas where the EMS has met, exceeded, or failed to meet expectations and these results are reviewed with management. Identify root causes of those outcomes, and develop additional goals and activities appropriate to each. It’s an opportunity to realize the organization’s commitment to continuous improvement and should not be looked upon negatively.”

meets, partially meets, failed to meet, or exceeded expectations. For those elements that failed to meet expectations, they are deemed as “findings” or “non-conformances” and the root cause must be identified and corrective action implemented to prevent reoccurrence. Corrective action responsibilities and due dates should be assigned accordingly, and the EMR must follow up to ensure corrective action is in place and working.

The second part of this element is management review. Management review is conducted with senior management and must be conducted to drive the organization’s continual improvement process. This review process helps keep management informed on the progress and direction of the EMS. It gives staff and management time to discuss environmental improvements and communicate about additional resource needs. The elements of the EMS should be reviewed for adequacy as well. Management review provides direct feedback on environmental programs and the future of the EMS within the organization.

The organization may have a Procedure documenting this element. Records from the identified findings, root cause, and correction action should be available for review. Additional records for management review should be available for review as well.

Assessment Process

<p><u>READ:</u></p> <ul style="list-style-type: none"> ▪ Previous Assessment Reports ▪ Findings and the associated Root Cause Analysis, Corrective Action, and Follow-up ▪ Management Review Meeting Report 	<p><u>EVIDENCE:</u></p> <ul style="list-style-type: none"> ▪ Review the previous Assessment Report and ask the EMR about the process to follow up on any findings. ▪ Have all findings been addressed and completed through a root cause analysis? ▪ Is corrective action in place and effective? If not, why? The root cause may need to be reevaluated. ▪ Are there any “open” findings from previous assessment? Ask the EMR to review and explain the status. ▪ Ask the EMR about management review. When was the last management review conducted? Has a management review meeting report or meeting minutes been prepared? If not, why?
<p><u>INTERVIEW:</u></p> <ul style="list-style-type: none"> ▪ EMR/EMS Core Team ▪ Senior management 	

Helpful Hints

- ✓ As part of the interview with the EMR during the assessment, get a copy of previous findings and see if they have been addressed. Is corrective action in place and effective? Look for evidence during the field observation.
- ✓ Check to see that the root cause analysis has been conducted, is adequate and corrected.

IX. Assessment Reporting and Follow-up

Upon completion of the assessment, the assessor will hold a closing meeting to disclose the preliminary findings of the assessment. At this time that the EMR/EMS core team should ask any questions about the assessment process and associated findings. After the closing meeting is conducted, the assessor will develop a draft assessment report documenting the assessment process, evidence collected and findings of the EMS assessment (See Example in Appendix D). The draft report will then be presented to EMR/EMS core team for their review and approval. After the assessment report is finalized, the EMR/EMS core team will assign findings to staff to develop and implement corrective action with assigned due dates. The EMR will follow up on corrective actions to ensure they are working effectively and close out the findings. The process will be documented in a written procedure by the EMR/EMS core team.

X. EMS Assessment Best Practices

Listed below are some examples of best practices that can be incorporated to achieve a successful and thorough assessment that will drive continual improvement within the organization's EMS assessment process.

- The EMS Auditor should work with the EMR to determine the schedule and necessary interviews
- Remember to schedule senior management interviews in advance
- Allow Flexibility in the Schedule-You Never Know Where the Assessment Will Take You
- The flow of the assessment should be decided by the EMS Assessor and the EMR but most assessments are conducted as follows:
 - Opening meeting
 - Interview with the EMR and conduct document review
 - Field visit to confirm EMR interview, document and records and knowledge of staff of the EMS
 - Review meeting with EMR to discuss any findings
 - Closing meeting
- Use your EMS Checklist and modify it as your EMS improves
- Follow "assessment trails"
- Look for objective evidence and record results
- Be friendly and patient
- Consider changing terminology or approach with each interview
- Generally explain the assessment process to the staff in advance of questions.
- Communicate to the EMR during the assessment

XI. Appendix

A. Example EMS Assessment Checklist

B. Example EMS Assessment Questions

C. Example EMS Assessment Plan

D. Example EMS Assessment Report